

**Amendments to the Claims**

This listing of claims will replace all prior versions and listings of claims.

1-33. (canceled)

34. (currently amended) ~~The An isolated polynucleotide of claim 32~~ which encodes at least 50 contiguous amino acid residues of SEQ ID NO:627.

35. (previously presented) The isolated polynucleotide which is fully complementary to the polynucleotide of claim 34.

36. (previously presented) An isolated polynucleotide consisting of at least 100 contiguous nucleotides of SEQ ID NO:625.

37. (previously presented) The isolated polynucleotide which is fully complementary to the polynucleotide of claim 36.

38. (previously presented) The isolated polynucleotide of claim 36 consisting of at least 300 contiguous nucleotides of SEQ ID NO:625.

39. (previously presented) The isolated polynucleotide which is fully complementary to the polynucleotide of claim 38.

40. (previously presented) The isolated polynucleotide of claim 38 consisting of the full length sequence of SEQ ID NO:625.

41-43. (canceled)

44. (currently amended) A method of detecting *Borrelia* nucleic acids in a biological sample comprising:

- (a) contacting the sample with the nucleic acid of claim 32 ~~34~~, under conditions such that hybridization occurs, and
- (b) detecting hybridization of said nucleic acids to the one or more *Borrelia* nucleic acid

sequences present in the biological sample.

45. (previously presented) A method of detecting *Borrelia* nucleic acids in a biological sample comprising:

(a) contacting the sample with the nucleic acid of claim 36, under conditions such that hybridization occurs, and

(b) detecting hybridization of said nucleic acids to the one or more *Borrelia* nucleic acid sequences present in the biological sample.